

\*----- ST REPORT INTERNATIONAL ONLINE MAGAZINE -----\*  
"The Original 16/32bit Online Magazine"  
from  
STR Publishing Inc.  
"

March 15, 1991

No.7.11

STReport International Online Magazineâ €  
Post Office Box 6672  
Jacksonville, Florida  
32205 ~ 6672

R.F. Mariano  
Publisher - Editor

Voice: 904-783-3319 10 AM - 4 PM EST  
BBS: 904-786-4176 USR/HST DUAL STANDARD  
FAX: 904-783-3319 12 AM - 6 AM EST

\*\* Fnet 350 \* Fido Node 1:112/35 \* NeST Node 90:3000/350.0 \*\*  
privately owned & operated STReport support BBS  
ALL issues of STReport International Online Magazine  
are available along with  
A worldwide list of private bbs systems carrying STReport

> 03/15/91: STReportâ € #7.11 The Original 16/32 bit Online Magazine!

- The Editor's Desk - CPU REPORT - MAC REPORT  
- Data Comp. Explored - SYS 7 Reviewed - FREENET VIEW  
- Scorpion BUSTED! - TOSFIX FIX - PORTFOLIO NEWS  
- YABOCUD IS HERE! - ATARI, NOW! - STR Confidential

\* ATARI ANNOUNCES NEW GOODIES! \*  
\* FTC INVESTIGATES MICROSOFT \*  
\* SIERRA BUYS BRODERBUND! \*

ST REPORT INTERNATIONAL ONLINE MAGAZINEâ €  
The \_Number One\_ Online Magazine  
-\* FEATURING \*-

"UP-TO-DATE News and Information"  
Current Events, Original Articles, Hot Tips, and Information  
Hardware - Software - Corporate - R & D - Imports

STReport's support BBS, NODE # 350 invites systems using Forem ST and Turbo Board BBS to participate in the Fido/F-Net Mail Network. Or, call Node 350 direct at 904-786-4176, and enjoy the excitement of exchanging information relative to the Atari ST computer arena through an excellent International ST Mail Network. All registered F-NET - Crossnet SysOps are welcome to join the STReport Crossnet Conference. The Crossnet Conference Code is #34813, and the "Lead Node" is # 350. All systems are most welcome to actively participate. Support Atari Computers; Join Today!

AVAILABLE EXCLUSIVELY ON: GENIE ~ CIS ~ DELPHI ~ BIX ~ FIDO ~ F-NET

=====

> The Editor's Podiumâ ¢

Atari is on the MOVE! Alwin Stumph of Atari Germany is heading up the group marketing the two new products, the Atari ST Book and ST pad world-wide. Here, at home, Atari US is on the verge of unleashing an extremely aggressive marketing campaign. Yessir.... For the first time in three years, I am confident we are about to witness the actions we have all been clamoring for.

Can you imagine being "proud" of owning and using an Atari ST and telling folks about the machine without them looking at you like you're ready for the rubber room? I can't hardly wait! Actually for a serious moment, this marks the end of what has been perhaps the roughest six month period most all US Atari developers and dealers have experienced. Both the hardware and software fields have been rather dismal to say the least. However in all fairness, I must point out the real facts, Atari is not entirely to blame. WE all must share some of the blame as we all sat on our collectively complacent bottoms when times were decent but getting shaky. We saw the shakiness in the market but refused to recognize it and try to help smooth the rough edges. Most all saw fit to let the "next guy" do something about it. Instead, politics was the order of the day with "Tony the Rug" 'playing the game' behind the scenes. Thankfully, those days and 'the rug' are gone forever! Atari has made the positive moves and changes. Perhaps even setting the example for the majority of us to learn from. Actions produce results, empty words produce rhetoric.

The Atari US team, (Team America, if you will) is destined for great things this year. The product lineup along with the expected market penetration are strong indicators of 1991 being the year of the "new beginning" and 1992 has all the earmarks of being the "Year of Atari". With the help of the users worldwide along with a generous, periodic, "enthusiasm fix" from Atari, we can make a BIG difference. We must all work together to make it happen.

Thank you for your Strong Support!

Ralph.....

ps; Hey Darek, its a BAD IDEA that will only bring HEADACHES.

TODAY'S NEWS ..TODAY!

=====

> STReport's Staff  
=====

The regulars and this week's contributors!

Publisher - Editor  
-----  
Ralph F. Mariano

Staff Editors:

-----  
Michael Arthur            Lloyd E. Pulley, Sr.            Dana P. Jacobson  
Lucien Oppler            Brad Martin            Walter Daniel  
Oscar Steele            Robert Allbritton

Contributing Correspondents:

-----  
Michael Lee            Richard Covert            Roger Stevens  
Brian Converse            Oliver Steinmeier            Ed Krimen  
Bill Elledge            Mark Leair

IMPORTANT NOTICE

=====

Please, submit letters to the editor, articles, reviews, etc...  
via E-Mail to:

Compuserve..... 70007,4454  
GEnie..... ST.REPORT  
Delphi..... RMARIANO  
BIX..... RMARIANO  
FIDONET..... 112/35  
FNET..... NODE 350  
NEST..... 90:19/350.0

\*\*\*\*\*

NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE

COMPUSERVE WILL PRESENT \$15.00 WORTH OF COMPLIMENTARY ONLINE TIME

to the Readers of;

ST REPORT INTERNATIONAL ONLINE MAGAZINEâ €

\*\*\*\*\*

"The Original 16/32bit Online Magazine"

NEW USERS; SIGN UP TODAY!

CALL: 1-800-848-8199 .. Ask for operator 198

You will receive your complimentary time  
and  
be online in no time at all!

WHAT'S NEW IN THE ATARI FORUMS (March 15)

NEW NOTE PAD COMPUTERS FROM ATARI

Atari has shown two new 68000-based Note Pad computers. See CEBIT.TXT in LIBRARY 1 of the Atari Arts Forum (GO ATARIARTS) for an eye witness report by Tom Harker of ICD Inc. covering the CeBIT '91 show in Hannover, Germany.

## NEW SHAREWARE TERMINAL PROGRAM

Version 1.10 of Cowboy Term -- a multi-featured communications package designed to run in medium and high resolution -- is available in LIBRARY 1 of the Atari Productivity Forum (GO ATARIPRO) as CTERM1.LZH.

## NEW DEMO PROGRAM

An EXCELLENT STe 4096 color/stereo demo program from Sweden is available in the Atari Arts Forum (GO ATARIARTS) LIBRARY 1 as ANCOOL.ARC.

## CODEHEAD ANNOUNCES MAXIFILE 3.0

Codehead Software announces the release of MaxiFile 3.0, a major upgrade to this excellent program! See the press release entitled MAX30.TXT in LIBRARY 16 of the Atari Vendors Forum (GO ATARIVEN).

## PROGRAM OF THE WEEK FROM DOUBLE CLICK

Don't miss "DC INVERT" available in LIBRARY 13 of the Atari Vendors Forum (GO ATARIVEN) as DCINV.ARC. DC INVERT will flash your screen whenever a BELL character is printed to the screen. You can set the flash rate. 100% Assembly; uses 536 bytes installed.

## GRIBNIF AND LEXICOR JOIN VENDORS FORUM

Please join us in welcoming GRIBNIF SOFTWARE and LEXICOR SOFTWARE to the Atari Vendors Forum (GO ATARIVEN)! Message Section 8 and Library 8 will be used by GRIBNIF SOFTWARE. Messages to them should be addressed to User ID number 75300,1131. Message Section 9 and Library 9 will be used by LEXICOR SOFTWARE. Messages to them should be addressed to User ID number 75300,763.

## PBASIC HARDCOPY MANUAL AVAILABLE FOR ORDER

BJ Gleason has uploaded a file with ordering information for his PBASIC hardcopy manual. SYSOP\*Ron Luks has seen a copy and he reports that it is a FABULOUS piece of documentation. See MANUAL.INF in LIBRARY 1 or LIBRARY 8 of the Atari Portfolio Forum (GO APORTFOLIO).

## THE ATARI PORTFOLIO FORUM ON COMPUSE HAS BEEN DESIGNATED AS AN OFFICIAL SUPPORT SITE BY ATARI CORPORATION

NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE NOTICE

\*\*\*\*\*

> CPU REPORTâ €  
=====

-----

by Michael Arthur

CPU INSIGHTSâ €

=====

## DATA COMPRESSION ALGORITHMS OF ARC.TTP, PKZIP, AND LHARC

=====

Much of the typical modem user's online time is spent performing uploads or downloads of files from BBS's, Online Services like CompuServe or GENie, or Information Networks like Usenet or Internet. Given that this always takes up a lot of time, and usually costs a considerable amount of money, the need to shorten the time necessary to perform file transfers, and other modem applications has always been prevalent. One innovation in this field has been the development of advanced Algorithms for compacting, or compressing data so it takes up much less space, and packing multiple files into one Archive, or data file, so many files can be sent at one time.

The current technology, an offspring of data encryption methods used in World War II, reduces the time it takes to transfer a file through a modem, by reducing the size of the data itself. Given the proliferation of many data compression methods (ARC, PKZIP, ZOO, SIT, and LHARC, for a few examples) that try to provide the most efficient method of data compression, the topic has always been controversial in nature.

Haruhiko Okumura provided a great source of knowledge about data compression algorithms by writing this essay, which describes some of the effort involved in creating a data compression standard. Except for modifications in its formatting, or presentation, and various notes placed in this text to provide more information on certain subjects, the content of Haruhiko Okumura's text is identical....

### Introduction: History of LHARC's Forefathers

-----

In the spring of 1988, I wrote a very simple data compression program named LZSS in C language, and uploaded it to the Science SIG (forum) of PC-VAN, Japan's biggest personal computer network. That program was based on Storer and Szymanski's slightly modified version of one of Lempel and Ziv's algorithms. Despite its simplicity, for most files its compression outperformed the archivers then widely used.

Kazuhiko Miki rewrote my LZSS in Turbo Pascal and assembly language, and soon made it evolve into a complete archiver, which he named LARC. The first versions of LZSS and LARC were rather slow. So I rewrote my LZSS using a binary tree, and so did Miki. Although LARC's encoding was slower than the fastest archiver available, its decoding was quite fast, and its algorithm was so simple that even self-extracting files (compressed files plus decoder) it created were usually smaller than non-self-extracting

files from other archivers.

Soon many hobby programmers joined the archiver project at the forum. Very many suggestions were made, and LARC was revised again and again. By the summer of 1988, LARC's speed and compression have improved so much that LARC-compressed programs were beginning to be uploaded in many forums of PC-VAN and other networks.

In that summer I wrote another program, LZARI, which combined the LZSS algorithm with adaptive arithmetic compression. Although it was slower than LZSS, its compression performance was amazing. Miki, the author of LARC, uploaded LZARI to NIFTY-Serve, another big information network in Japan. In NIFTY-Serve, Haruyasu Yoshizaki replaced LZARI's adaptive arithmetic coding with a version of adaptive Huffman coding to increase speed. Based on this algorithm, which he called LZHUF, he developed yet another archiver, LHarc.

Data Compression Algorithms, Lempel-Ziv, and ARC.TTP

-----

In what follows, I will review several of these algorithms and supply simplified codes in C language.

### 1. RLL Encoding

Replacing several (usually 8 or 4) "space" characters by one "tab" character is a very primitive method for data compression. Another simple method is Run-Length coding, which encodes the message "AAABBBBAACCCC" into "3A4B2A4C", for example.

### 2. LZSS coding

This scheme is initiated by Ziv and Lempel [1]. A slightly modified version is described by Storer and Szymanski [2]. An implementation using a binary tree is proposed by Bell [3]. The algorithm is quite simple: Keep a ring buffer, which initially contains "space" characters only. Read several letters from the file to the buffer. Then search the buffer for the longest string that matches the letters just read, and send its length and position in the buffer.

If the buffer size is 4096 bytes, the position can be encoded in 12 bits. If we represent the match length in four bits, the <position, length> pair is two bytes long. If the longest match is no more than two characters, then we send just one character without encoding, and restart the process with the next letter. We must send one extra bit each time to tell the decoder whether we are sending a <position, length> pair or an unencoded character.

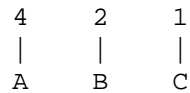
### 3. LZW coding

This scheme was devised by Ziv and Lempel [4], and modified by Welch [5]. The LZW coding has been adopted by most of the existing archivers, such as ARC and PKZIP. The algorithm can be made relatively fast, and is suitable for hardware implementation as well. A Pascal program for this algorithm is given in Storer's book [6].

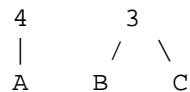
The algorithm can be outlined as follows: Prepare a table that can contain several thousand items. Initially register in its 0th through 255th positions the usual 256 characters. Read several letters from the file to be encoded, and search the table for the longest match. Suppose the longest match is given by the string "ABC". Send the position of "ABC" in the table. Read the next character from the file. If it is "D", then register a new string "ABCD" in the table, and restart the process with the letter "D". If the table becomes full, discard the oldest item or, preferably, the least used.

#### 4. Huffman coding

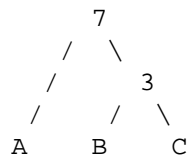
Classical Huffman coding is invented by Huffman [7]. A fairly readable account is given in Sedgewick [8]. Suppose the text to be encoded is "ABABACA", with four A's, two B's, and a C. We represent this situation as follows:



Combine the least frequent two characters into one, resulting in the new frequency  $2 + 1 = 3$ :



Repeat the above step until the whole characters combine into a tree:



Start at the top ("root") of this encoding tree, and travel to the character you want to encode. If you go left, send a "0"; otherwise send a "1". Thus, "A" is encoded by "0", "B" by "10", "C" by "11". Altogether, "ABABACA" will be encoded into ten bits, "0100100110". To decode this code, the decoder must know the encoding tree, which must be sent separately.

A modification to this classical Huffman coding is the adaptive, or dynamic, Huffman coding. See, e.g., Gallager [9]. In this method, the encoder and the decoder processes the first letter of the text as if the frequency of each character in the file were one, say. After the first letter has been processed, both parties increment the frequency of that character by one. For example, if the first letter is 'C', then freq ['C'] becomes two, whereas every other frequencies are still one. Then the both parties modify the encoding tree accordingly. Then the second letter will be encoded and decoded, and so on.

#### 5. Arithmetic coding

The original concept of arithmetic coding is proposed by P. Elias. An implementation in C language is described by Witten and others [10].

Although the Huffman coding is optimal if each character must be encoded into a fixed (integer) number of bits, arithmetic coding wins if no such restriction is made.

As an example we shall encode "AABA" using arithmetic coding. For simplicity suppose we know beforehand that the probabilities for "A" and "B" to appear in the text are  $3/4$  and  $1/4$ , respectively.

Initially, consider an interval:

$$0 \leq x < 1.$$

Since the first character is "A" whose probability is  $3/4$ , we shrink the interval to the lower  $3/4$ :

$$0 \leq x < 3/4.$$

The next character is "A" again, so we take the lower  $3/4$ :

$$0 \leq x < 9/16.$$

Next comes "B" whose probability is  $1/4$ , so we take the upper  $1/4$ :

$$27/64 \leq x < 9/16,$$

Because "B" is the second element in our alphabet, {A, B}. The last character is "A" and the interval is

$$27/64 \leq x < 135/256,$$

which can be written in binary notation

$$0.011011 \leq x < 0.10000111.$$

Choose from this interval any number that can be represented in fewest bits, say 0.1, and send the bits to the right of "0."; in this case we send only one bit, "1". Thus we have encoded four letters into one bit! With the Huffman coding, four letters could not be encoded into less than four bits.

To decode the code "1", we just reverse the process: First, we supply the "0." to the right of the received code "1", resulting in "0.1" in binary notation, or  $1/2$ . Since this number is in the first  $3/4$  of the initial interval  $0 \leq x < 1$ , the first character must be "A". Shrink the interval into the lower  $3/4$ . In this new interval, the number  $1/2$  lies in the lower  $3/4$  part, so the second character is again "A", and so on. The number of letters in the original file must be sent separately (or a special 'EOF' character must be appended at the end of the file).

The algorithm described above requires that both the sender and receiver know the probability distribution for the characters. The adaptive version of the algorithm removes this restriction by first supposing uniform or any agreed-upon distribution of characters that approximates the true distribution, and then updating the distribution after each character is sent and received.



In each step the LZSS algorithm sends either a character or a <position, length> pair. Among these, perhaps character "e" appears more frequently than "x", and a <position, length> pair of length 3 might be commoner than one of length 18, say. Thus, if we encode the more frequent in fewer bits and the less frequent in more bits, the total length of the encoded text will be diminished. This consideration suggests that we use Huffman or arithmetic coding, preferably of an adaptive kind, along with LZSS. This is easier said than done, because there are many possible <position, length> combinations. Adaptive compression must keep running statistics of frequency distribution. Too many items make statistics unreliable.

#### LZARI, and the Creation of a Data Compression Program

-----

What follows is not even an approximate solution to the problem posed above, but anyway this was what I did in the summer of 1988.

I extended the character set from 256 to three-hundred or so in size, and let characters 0 through 255 be the usual 8-bit characters, whereas characters 253 + n represent that what follows is a position of string of length n, where n = 3, 4, .... These extended set of characters will be encoded with adaptive arithmetic compression.

I also observed that longest-match strings tend to be the ones that were read relatively recently. Therefore, recent positions should be encoded into fewer bits. Since 4096 positions are too many to encode adaptively, I fixed the probability distribution of the positions "by hand". The distribution function given in the accompanying LZARI.C is rather tentative; it is not based on thorough experimentation. In retrospect, I could encode adaptively the most significant 6 bits, say, or perhaps by some more ingenious method adapt the parameters of the distribution function to the running statistics.

At any rate, the present version of LZARI treats the positions rather separately, so that the overall compression is by no means optimal. Furthermore, the string length threshold above which strings are coded into <position, length> pairs is fixed, but logically its value must change according to the length of the <position, length> pair we would get.

#### 7. LZHUF

LZHUF, the algorithm of Haruyasu Yoshizaki's archiver LHarc, replaces LZARI's adaptive arithmetic coding with adaptive Huffman. LZHUF encodes the most significant 6 bits of the position in its 4096-byte buffer by table lookup. More recent, and hence more probable, positions are coded in less bits. On the other hand, the remaining 6 bits are sent verbatim.

Because Huffman coding encodes each letter into a fixed number of bits, table lookup can be easily implemented. Though theoretically Huffman cannot exceed arithmetic compression, the difference is very slight, and LZHUF is fairly fast.

#### References:

-----

- [1] J. Ziv and A. Lempel, IEEE Trans. IT-23, 337-343 (1977).
- [2] J. A. Storer and T. G. Szymanski, J. ACM, 29, 928-951 (1982).
- [3] T. C. Bell, IEEE Trans. COM-34, 1176-1182 (1986).
- [4] J. Ziv and A. Lempel, IEEE Trans. IT-24, 530-536 (1978).
- [5] T. A. Welch, Computer, 17, No.6, 8-19 (1984).
- [6] J. A. Storer, Data Compression: Methods and Theory (Computer Science Press, 1988).
- [7] D. A. Huffman, Proc IRE 40, 1098-1101 (1952).
- [8] R. Sedgewick, Algorithms, 2nd ed. (Addison-Wesley, 1988).
- [9] R. G. Gallager, IEEE Trans. IT-24, 668-674 (1978).
- [10] I. E. Witten, R. M. Neal, and J. G. Cleary, Commun. ACM 30, 520-540 (1987).

---

> CPU STATUS REPORTâ €  
 =====

LATE BREAKING INDUSTRY-WIDE NEWS

Issue #12

Compiled by: Lloyd E. Pulley, Sr.

- Torrance, California  
 -----

NEW FILE COMPRESSION SYSTEM SHOWN

A new PC graphics file compression system capable of packing a five meg graphics file down to just one meg had been released by Video Image Compression Corporation (VIC). The program, Picture Packer, is available as a \$79 software package which will compress the five meg file in 20 seconds or as a \$595 software package plus accelerator board which will do the same job in about 3 seconds on a typical AT with both having similar decompression times. A freely-copyable decompression utility may be given to other users with the compressed files.

Picture Packer works on the most common bit-image file types - Targa, Gif, Tiff, and PCX. Bit-image files can be compressed in this way, since they are effectively a map of all dots in the image, even the blank (white) dots, and therefore have a lot of waste space. Vector graphics files cannot be compressed using this technique.

- Beaverton, Oregon

NEW VIRUS PROTECTION PROGRAM

-----  
Combining virus protection with a 24-hour hotline support program, and a quarterly newsletter, Central Point Software has entered into the PC anti-virus wars with its Anti-Virus program.

According to a statement released by Central Point, Anti-Virus can detect, eliminate and prevent infection caused by more than 400 known and unknown viruses in DOS, Windows and networked environments. The program makes executable files self-protecting, can run as a memory resident module and can be configured to make it suitable for users with different levels of experience.

- Oakhurst, California  
-----

SIERRA AND BRODERBUND UNITED

In an acquisition called "more a merger of equals", Sierra On-Line Inc, has acquired Broderbund Software for about \$37.9 million worth of stock. The combined firms will be known collectively as Sierra-Broderbund and will continue to exist "as sister companies sharing a common distribution mechanism" with Broderbund being a subsidiary with its own separate publishing operation.

- Tokyo, Japan  
-----

SUN TO MAKE MULTIMEDIA WORKSTATION

Sun Microsystems has agreed to join with Fujitsu, Toshiba and Matsushita to develop a next-generation multimedia workstation. The agreement calls for the development of technologies concerned with the compression and decompression of digital motion pictures, a pictorial data processing IC, a window processor for motion pictures and high-speed data transmission.

The multimedia workstation is being developed with the Integrated Services Digital Network (ISDN) market in mind, a technology which is expected to gain wide acceptance within the next five years. Sun Microsystems aims to sell the workstation to the education, seminar, and business presentation markets.

- Atlanta, Georgia  
-----

RURAL MISSISSIPPI GETS \$1.25 MILLION FROM IBM

IBM is donating hardware, educational courseware, teacher training and technical support worth \$1.25 million to Mississippi 2000, an interactive distance learning program that links teachers and students in rural classrooms across the state through two-way audio and video transmission.

IBM donated and installed 119 computers at eight sites with each classroom networked with the IBM Classroom LAN Administration System Version 1.3. Plans are currently underway to network all classroom sites, allowing the exchange of computer information in addition to audio and video transmission. Each site is equipped with computer hardware and software, video cameras, microphones, television monitors, video

cassette recorder (VCR), telephone and fax machine and uses fiber optic technology which allows simultaneous communications in classrooms across the state, so that teachers and students can simultaneously see and hear each other.

- Cupertino, California  
-----

OLDER MAC PRICING CUT

In a change from last years marketing strategy of pursuing high-powered and high-margined sales, Apple Computer has cut the prices on all of its older Macintosh models in hopes to gain a larger market share. Prices on the IIcx, IIfx and SE/30 were cut as much as 31%. At the same time, prices for Apple's PostScript-based laser printers were cut up to 21% to bring them in line with the new printers which the company announced.

- Cupertino, California  
-----

APPLE INTRODUCES NEW PRINTERS

Apple Computer has introduced two printers; the Apple StyleWriter, a thermal ink-jet printer with a 360 dpi high quality mode and a suggested retail price of \$599; and the Apple Personal LaserWriter LS, a 300 dpi, 4 pages per minute, stand-alone laser printer that is not designed to be hooked up to a network with a suggested retail price of \$1,299.

- New York, New York  
-----

ANOTHER HACKER ARRESTED

After a year long investigation, the New York State Police and the US Secret Service have arrested 20-year-old Paul Stira (aka SCORPION). Stira is charged with device fraud, a violation of Federal Code 1049, which deals with unauthorized access to computer systems as well as falsification of telephone credit card calling numbers and carries a penalty of up to 10 years in prison.

New York State Police Senior Investigator Donald Delaney, who also participated in the arrest, pointed out that "Stira was the last of four whose homes were searched in January, 1990." Stira indicated that, from his contacts at the monthly "2600" hacker meetings, computer crime is way down. Perhaps the investigatory efforts of the various police agencies have led to this decrease."

- San Francisco, California  
-----

APPLE WINS THIS ROUND IN SUIT

In denying motions from Microsoft and Hewlett-Packard that said Apple's case against them should be dismissed because the Macintosh interface wasn't really Apple's to protect, U.S. District Judge Vaughn Walker has cleared the way for a trial on Apple's copyright infringement case against Microsoft and Hewlett-Packard. Judge Walker did not resolve the question of whether Microsoft and HP infringed on Apple's copyright. His ruling only answered whether Apple owned something which could be

infringed upon.

Walker also ruled that parts of the interface -- overlapping windows and icon -- were not licensed to Microsoft or Hewlett-Packard.

At issue in the three-year-old case is whether Microsoft's Windows 2.03 and Hewlett-Packard's New Wave implementation of it infringed on Apple's copyright of its Macintosh interface. Microsoft had secretly licensed the Mac interface from Apple for Windows 1.0, but Apple claims that Windows 2.03 is a different product that required a separate license. No suit has been filed over Windows 3.0.

Xerox last year tried in vain to protect the Star's interface in much the same way Apple is trying to protect the Mac interface. One of the reasons Xerox was turned away was because it had waited too long to file its suit.

- Redmond, Washington

FTC INVESTIGATING MICROSOFT

-----  
The Federal Trade Commission (FTC), which investigates anti-trust and restraint of trade cases, is apparently interested in whether Microsoft is intentionally restricting the functionality and features of future versions of Windows. The investigation apparently arose from a press release and statement issued by Microsoft during the 1989 Fall Comdex concerning its future plans for Windows.

At the time, Microsoft had been going to considerable lengths to reassure software developers who had gotten wind of the upcoming release of Windows 3 that there was still a future for OS/2, and had stated that OS/2 would remain aimed at the network server and upscale workstation market. Presumably, the FTC read that as a conspiracy to restrict the powers of Windows. At the time, however, the announcement was not greeted with any surprise, since Windows is still based on DOS, and DOS cannot offer the same kind of multi-user throughput as OS/2.

Microsoft has released a statement saying it first received notification of the investigation in June of 1990 and is complying with requests for information made by the FTC made as part of a non-public investigation, apparently concerning Microsoft's plans for MS-Windows.

\*\*\*\*\*

:HOW TO GET YOUR OWN GENIE ACCOUNT:

---

To sign up for GENie service: Call: (with modem) 800-638-8369.

Upon connection type HHH (RETURN after that).  
Wait for the U#= prompt.

Type: XTX99587,CPUREPT then, hit RETURN.

\*\*\*\* SIGN UP FEE WAIVED \*\*\*\*

The system will now prompt you for your information.

-> NOW! GENIE STAR SERVICE IS IN EFFECT!! <-

\*\*\*\*\*

> MAC REPORTâ €

=====

Issue #002

-----

by Robert Allbritton

Quite a bit of action going on in the industry this week including new products and prices from Apple, a little progress on the court battles and Microsoft's investigation by the SEC.

> MAC NEWSâ €

LOW COST INKJET & LASER PRINTERS!

=====

\*\*\* Apple Introduces Low Cost Inkjet & Laser Printers.

With the introduction of the StyleWriter inkjet printer, Apple has finalized its transition to a high volume, price competitive computer company. In comparison to the older ImageWriter dot matrix printer, the StyleWriter sells for about the same price (\$450) and prints at about the same speed, but the new 360 dpi StyleWriter has much better print quality and it can print on transparencies (a first for an inkjet printer.) Suggested retail of the StyleWriter is \$599 but it has been priced from several retailers for as low as \$450.

Both the StyleWriter inkjet and the new Personal LaserWriter LS share Apple's new TrueType outline font technology. TrueType is a direct replacement for Adobe's PostScript and will be built into the new System 7.0 software due from Apple in mid May. (A patch is included for the current System/finder.) While TrueType claims better quality output than PostScript, it defiantly uses less memory: the Personal LaserWriter LS needs only 512K. Other features of the Personal Laserwriter LS include a special serial chip that will allow data to be sent to the printer at 909K per second (about 3 times faster than AppleTalk) and background printing software, which frees up the Macintosh for normal use while it is printing. The Personal LaserWriter LS has a suggested retail of \$1,299. Street price is expected to be under \$1,000.

\*\*\*

MORE APPLE PRICE CUTS: '030 MACS AND LASERS

I called most of the latest round of Apple price cuts correctly last week, but there were more of them than I expected.

#### HERE ARE THE NEW OFFICIAL PRICES

	Old Price	New Price	Change
Macintosh IIfx (4MB/floppy)	\$8,969	\$7,369	-\$1,600 -18%
Macintosh IIfx (4MB/80HD)	\$9,869	\$8,069	-\$1,800 -18%
Macintosh IIfx (4MB/160HD)	\$10,969	\$8,669	-\$2,300 -21%
Macintosh IIfx (5MB/floppy)	\$5,969	\$5,269	-\$700 -12%
Macintosh IIfx (5MB/80HD)	\$6,669	\$5,969	-\$700 -10%
Macintosh SE/30 (1MB/40HD)	\$4,369	\$3,369	-\$1,000 -23%
Macintosh SE/30 (4MB/80HD)	\$5,569	\$3,869	-\$1,700 -31%
Personal LaserWriter NT	\$3,299	\$2,599	-\$700 -21%
LaserWriter IINT	\$4,499	\$3,999	-\$500 -11%
LaserWriter IINTX	\$5,999	\$4,999	-\$1,000 -16%

Additionally, the Macintosh IIsi now comes with 3Mb of RAM as standard equipment (no change in price) and a new bundle of a Mac IIsi (5mb RAM, 80mb Hard Drive), NuBus adapter with 68882 Math Co-processor, and A/UX 2.0.1 UNIX operating system for \$5,169 is now available. The Macintosh IIX and Mac IICx are officially discontinued as of this week.

\*\*\*

#### ADOBE DOMINATES APPLE & MICROSOFT WITH MULTIPLE MASTER

When Apple and Microsoft agreed to co-operate to create TrueType, many thought it would be a major blow to Adobe. TrueType was to offer superior performance and better support than PostScript, but Adobe had a few tricks up their sleeve. The latest is called Multiple Master, and it has quickly stolen much of the thunder that followed Apple's introduction of their first TrueType products.

Multiple Master is a whole new technology that will allow users to manipulate the style, width, weight, and scale of a font from within an application on the fly. In addition it will allow these changes to be recorded in the application's document and will be platform independent. (Note: an patch to the Macintosh OS will be required.)

These capabilities will have vast impacts on how word processing and desktop publishing applications work. For example: if you need to cram a long line of text on to a single line with current word processors, you must "squish" the characters closer to one another. With Multiple Master, the font itself will become more narrow, producing much more legible text.

Adobe will have two Multiple Master fonts available this summer (a serif and a sans serif) and they are making the technology available to other font manufactures such as ITC, Agfa, MTI, Bitstream, and Linotype. Best news of all is that Multiple Master will be compatible with current PostScript output devices (compatibility is not guaranteed for PostScript printer clones.)

> MacREVIEWâ €  
=====

"... what makes System 7 so special?"

part 1

DIFFERENCES AND SIMILARITIES OF THE MAC AND ST/TT  
=====

It has been in the works for two years now. It is said to be Apple's answer to Windows 3.0. It is due in two months. It is System 7.0. But what makes System 7 so special, so important, so great? Over the next few weeks we will look at the various features of System 7 and how they will effect computing on the Macintosh.

There are some basic differences between the Macintosh Operating System (System/Finder or Mac OS) and the Atari ST/TT Operating System (TOS.) The ST/TT has always had a split personality. There is the TOS side of it, which is VERY similar to older versions of MS-DOS. This was originally done for that exact reason: make ST programming similar to MS-DOS programming and it won't be hard to port popular MS-DOS programs: a very sound, logical idea. On the other hand, the ST/TT has GEM. GEM is much more like the Mac OS. Everything is in a window. There are basic structures common to all GEM programs, like the file selector and the menu bars. All GEM programs work basically the same, and thus are very easy to learn. For example, the ST/TT desktop follows the GEM guidelines. Everything on the Mac is similar to GEM, or rather what GEM might have become. The Mac OS is much more powerful and complex than GEM, and there is no text based equivalent to TOS in the Mac.

Unlike the Atari ST/TT, the Macintosh still loads a considerable amount of its operating system off of the disk every time the Mac is turned on. This is one reason the ST has the ability to start up much quicker than the Mac and the Mac can have its Operating System become corrupt. However; having much of your operating system on disk also allows easy upgrades and modifications.

While ST users have alternate desktops, such as NeoDesk, Mac users rely on Apple to change the basic desktop (called the Finder.) For the first time in years, System 7 radically changes the Finder. For the past few years, Mac users have had two alternative desktops they could use: Finder and MultiFinder. The main difference being that MultiFinder allowed multiple applications to run at once. Note that I did not say that MultiFinder was MultiTasking, technically it is not. What MultiFinder does offer is 99% of multitasking.

In order for programs to properly operate under MultiFinder they must be "MultiFinder aware", this means that the programmer must make some basic (but simple) changes to his code as to allow other programs to share the computer, and most Mac Programs are MultiFinder aware. The main difference between MultiFinder and Multitasking is what is known as "pre-emptive multitasking" this is the computer's ability to tell each program exactly how much time they have before they must give control back to the operating system.

Mac programs work the other way around: they have control over the computer until THEY decide to give it back to the operating system (so control can be passed on to other applications that are running.) If a



program is properly written, the user will not notice the difference between MultiFinder and true Multitasking.

The reason all of this is so important is that with System 7, MultiFinder is now standard equipment. The old single program at a time Finder is gone, and the new Finder is a significant improvement over the old MultiFinder.

ST/TT desk accessories have always been found under the drop down menu on the far left, which is exactly the same as the Mac. In order to have a DA loaded into your ST/TT, all you had to do was leave it in your root directory. The Mac has always been more difficult with this process: You had to get a special utility called the "Font/DA Mover" to install Desk Accessories and Fonts in your Mac, and then you had to turn the Mac off and back on again so they could be properly loaded in. Considering all the hoopla most people make about how the Mac is so easy to use, this is one thing that I always found to be medieval. All of that is gone.

Every Mac has a "System Folder" this is where the System/Finder and other critical files are located. Under System 7 to install a DA or Font all you have to do is move it into the "Apple Menu Items" folder inside the System Folder. No restarts needed, they automatically appear.

There are two ways fonts can be displayed. The computer can keep a bitmap of the way the font is supposed to look in memory, or the computer can keep an algorithm of how to draw the font. Obviously, the bitmap system only works for one particular size of the font (you try to make a bitmap larger, but it doesn't look very good.) The algorithm can be used to make the letters any size you want. This is the way Calamus, PostScript, and the new GDOS create good looking text at any size. Now Apple has finally adopted Outline Fonts as a part of System 7. Apple calls it TrueType and it is supposed to be better than PostScript (although PostScript has made some major advances recently.) TrueType can display text either to the screen or to printers to the best quality that the device can deliver. The fact that it is now standard equipment is a major enhancement.

Look for part 2 next week in the MacReport.

As always.. Email to MacReport can be sent to  
CompuServe: 71630,457 GEnie: j.allbritto2

See you next week!

---

> CLEVELAND FREENET! STR OnLineâ €  
=====

"STARSHIP OF A REVOLUTION"

THE "NEWLY REMODELED" ATARI S.I.G. OPENS  
=====

By: Mark Leair  
Atari SIG Public Relations

The Cleveland Freenet is the starship of a revolution that is going on right now. This revolution is the computerized information revolution. What the Cleveland Freenet is leading what public libraries were leading approximately a century ago; free public access to information. In Freenet's case, it's free public access to computerized information.

Upon connecting to the Freenet by modem one gains access to well over 100 special interest groups including a medical and dental information dispensary. Other special interest groups (SIGs) include science fiction forums, veterinary SIGs, gaming and chess SIGs, just to scratch the service. There's even a USA Today Headline news forum! Freenet also has a wide range of computer forums.

The Cleveland Freenet Atari SIG is one of the many computer forums, and the operators of the Atari SIG are proud to announce the grand opening of the newly remodeled Atari SIG. We now feel that this SIG now fully covers (or has the potential to as soon as users start using the new features) every aspect of the Atari computer (XL, XE, ST, Mega, STE, Portfolio, etc.) and related products (Lynx, etc.).

The biggest addition to the SIG is the Programming and Development forum. Our newly acquired S.I.G. Operator Peter Haller, a professional programmer, has taken charge of this section moderating the technical Q&A, Graphics Design, Hardware development, MIDI development, Source Code Library, and many other specialized development and programming boards. This board can definitely become a developer and Atari hacker's (The old definition of "hacker") delight!

Other areas include a somewhat "dumb" but useful computer file section, moderated by newly acquired librarian, Marc Lombardo, and a product Information and Support board. This board includes a vast library of support lists including lists of Atari magazines, dealers, manufacturers phone numbers, Atari Corp. price lists, as well as product news. Lastly a special applications area has been added. Presently there's only a MIDI user board there, but this is expected to expand in the future.

Additionally, the Atari SIG still has its news sections, usergroup newsletter library, Online magazine section, (where you'll find STReport, Znet, etc.), general as well as specific computer discussion boards (8 bit, 16/32 bit, Portfolio, and Lynx), and our weekly multi-chat conference which meets on channel +Ataricon Sunday at 8 pm EST.

Accessing the Atari SIG has never been easier. One can access it via Internet by telenet'ing to 129.22.8.75 or "Freenet-in-b.cwru.edu" or by calling (216) 368-3888 300/1200/2400 bps. Once on the system, a user can apply for an account application and logon as a visitor. Once here, simply type "Go Atari" to get to the Atari SIG. A visitor can go anywhere on the Freenet and can read anything. They can't post messages until they get their permanent accounts, however. For additional information on obtaining access to Freenet write to myself via the e-mail addresses above or by writing the SIG at its US mail address:

The Atari SIG  
P.O. Box 21815  
Cleveland, OH 44121 USA

Lastly, a freenet application is available in the mail by writing a request to the above address if you rather not download it from Freenet. The Atari SIG is ready to serve the thousands of Atarians throughout the world. We look forward to seeing you all real soon! Remember the staff of the Atari SIG are volunteering their time for no pay and the Cleveland Freenet, as well as the Atari S.I.G., is a non-profit organization existing for the free exchange of information.

---

> TOSFIX FIX STR InfoFileâ ¢ AES FILE PARSE BUG IN RAINBOW TOS 1.4  
=====

GET THE RAID!  
=====

by Bill Elledge

The TOS14FIX patch program that Atari distributed to fix the RS-232 flow control bug and AES file parse bug in Rainbow TOS 1.4 causes a new bug to be introduced.

The TOS14FIX.PRG is a small patch program that is placed into the AUTO folder to correct the above two bugs. There is only one known version this file and it is 689 bytes long. It was originally distributed along with a group of various utilities for TOS 1.4 in an archived file on the various on-line services.

This patch wedges itself into the XBIOS trap vector (14) and checks for the function code of the Rsconf command (15) on the stack. All other XBIOS commands are passed through. The Rsconf command is used to configure the RS-232 port, it allows the baud rate, flow control, parity, bit size and start and stop bit parameters to be set. The reason for the patch is that the Rsconf built into the TOS 1.4 ROMS does not recognize the flow control parameter properly. The TOS14FIX patch corrects this problem, however in doing so a new bug is introduced.

Besides the ability to set the RS-232 parameters, Rsconf can be setup to return the current configuration parameters. A new feature was added to TOS 1.4 which allows the current baud rate to be returned. This is accomplished by passing the first argument to Rsconf as a -2. Without the TOS14FIX patch, Rsconf works as documented.

With this patch installed, attempting to executing Rsconf will cause a system crash, most likely an illegal instruction error (4 bombs):

## C Language Example:

```
baud_rate = Rsconf (-2, -1, -1, -1, -1, -1);
```

The TOS14FIX program contains a simple coding error (more than likely caused by a typo) that creates this problem. The patch contains a sequence of 680x0 instructions that check for a -2 value on the stack, when this is the case the baud rate code is read from the internal RAM location where it has been previously saved and placed into the D0 register for return to the calling program. The problem is the instruction that follows is a RTS (Return from Subroutine), it should be a RTE (Return from Exception). This causes the stack of the 680x0 to not return to the proper state, thus causing the bombs.

Below is the code section disassembled from the TOS14FIX program.

```
CMPI.W    #-2,2(A0)          ; is baud rate argument = -2 ?
BNE       NOT_BAUD           ;
MOVE.W    $A6E,d0            ; return baud rate code
RTS                          ;
NOT_BAUD:                                ; jump here if not -2
ORI.W     #$700,SR           ; disable interrupts
```

The problem should be corrected by the source (Atari) and re-released to the public. However until that time, users can correct their copy of the patch by using a file editor changing one byte that will cause the RTS to become an RTE. Using a file editor (like Gribnif's Memfile 3.0 or CodeHead's Look It!), load the TOS14FIX.PRG into memory.

At byte offset \$017D (hexadecimal) from the start of the file will be byte with the value \$75 (hexadecimal). Change this value to a \$73 (hexadecimal) and save the file.

That's It.

The RTS instruction (opcode \$4E75) now becomes a RTE instruction (opcode \$4E73).

It would probably be a good idea to change the name of the file, so as not to confuse it with an unpatched version (i.e. TOS14FIG.PRG instead of TOS14FIX.PRG, where the G stands for good version.) Reboot with the new file in the AUTO folder and the bug will be eliminated.

Some people may wonder why this bug was not uncovered some time ago, since the patch was released in late 1989? The answer is that the new capability of the Rsconf command to be able to return the baud rate is not utilized by current software products that communicate via the RS-232 port. Most were released prior to the introduction of TOS 1.4. With the new Mega STe and TT models supporting more than one RS-232 port, it is a good programming practice for an application to restore the baud rate to its previous value (the same as it is a good practice to restore the color palette.) With desk accessories and applications using the RS-232 ports back and forth, saving the RS-232 parameters can avoid program conflicts.

---

> THE FLIP SIDE STR Featureâ €  
=====

"....a different viewpoint"

A LITTLE OF THIS, A LITTLE OF THAT  
=====

by Michael Lee

From Chris Vogtv on CIS...

Greetings Atarians. I am not a member of this forum (my friend is a member and I'm using her Atari)...I'm house-sitting here and using this Atari 1040STe to finish up some work while I'm here, and I'm not having any trouble at all. In fact I must admit that as an IBM user I believed until now that an IBM was the ONLY way to go in a personal computer. I must say that I was surprised at how versatile and easy to use this unit really is. It seems to adapt well to any application.

-----

Some comments from Genie about the new game from Accolade "Elvira"...

Compilation of several posts from Jim Brown....

This is a terrific looking and sounding game, I am really enjoying this game. The graphics are some of the best I've seen, but it is not for the squeamish. It has some really gross screens and sequences... or really cool, depending on who you ask. The two 9 year old boys who regularly steal computer time on my system can't wait to get killed in new and grosser ways.

The animation is a little slow but there is a LOT of it. The program appears to have at least 32 colors on the screen at once and the graphics look more like Spectrum 512 than anything else. The animation is whole screen also (well, whole play area, about 1/2 of the screen) ...With 2.5 meg it seems to remember all graphics once loaded, cutting down drive time considerably...This is a case where the photo-real graphics remained photo-real after being converted from the Amiga. Elvira's character not only looks like her (digitized graphics) and sounds like her (digitized sound), she even acts like her (digitized personality?)

The speed is pretty good on my hard drive but I'd hate to run it from floppy though. Anyway, I'm having fun, but the frustration factor is getting high.

From Jeff W. (Sysop)...

You have to help Elvira find her chest! Before someone says, "Gee, must be a real easy game," Elvira is being held captive in a castle, but needs her magic spells that are stored in a hidden treasure chest in order to escape. Your job is to search the castle, find the chest, and return it to Elvira...I've looked at this game briefly at the

store and I'm thinking of buying it. Considering that it comes on five [double-sided] disks and can run off a hard drive, I am all the more intrigued.

From M.Chew...

My first impression is that it's a pretty good game with great graphics. A hard drive is virtually required to play this game though since it takes forever to load the program and to load new data off the floppies. I did run into some problems (bugs ?) with this game when running it on my system. I've found that ELVIRA hates the ICDTIME program - it would crash unpredictably after running for a little while when you click the mouse on something (4 bombs.) I've also found that moving items in the inventory window would crash the program (2 bombs) when I'm running with all 4 megabytes of RAM available on my 1040StE. Running CNF1040.TOS to lower the available memory down to 1 megabyte seem to solve the problem.

From Jim Brown...

I'm running TOS 1.4 with 2.5 meg of RAM and a Megafile 30 hard drive. I've had no bombs, bugs or other in Elvira.

-----

Many folks have been wondering what his happening with the Flash 2.0 version that was promised several months ago. Here's some comments that were on CIS about it...

Compilation of some posts by Alexander Golitsis....

When Joe Chiazzese used to manage Electronic Playworld, I would often talk to him about future projects. He used to tell me that Allan Page was working on FLASH 2.0 (just one of the new features was to be "auto-learning", i.e., no more writing .DO files) and he was working on the Amiga version of the same program (I even saw an early version). However, In the last couple of years, I have heard nothing. Has anyone even had contact with Alan recently?

From Jim Ness (Sysop) on CIS...

Alan was around a couple of months ago, and told me that Flash was dead. When I mentioned the rumor about Antic and Flash 2, he knew nothing about it. So, we have been assuming that Antic was using some other author.

Compilation of posts from Bob Brodie (Atari User Group Coordinator) on CIS...

...I too was told that Alan was working on Flash 2.0. Some of my friends and sources in Canada even tell me that Alan and Joe have long ago finished their version of Flash 2.0. All that is waiting is for Antic Software to make them a "real" deal...but some business problems prevented them from releasing it via Antic...but all of this is just hearsay...it's still one of my favorite programs. I'd dearly like to use it with the TT.

From Ron Luks (Main Sysop) on CIS...

The program that has been called "FLASH 2.0" from ANTIC SOFTWARE isn't being done by Alan and Joe. Its actually a different program from an Australian author that has many of the features of the FLASH written by Alan and Joe (and of course, a bunch of new ones).

...Charles [Cherry] and I talked quite a bit about FLASH 2.0 last September/October, but things have stalled in the development stage.

Last time I spoke with Jim Capparell, he didn't know if it would be finished and released for sale.

As far as I know, Alan and Joe are not working on any updates to THEIR program called FLASH (the one we now use as ver 1.6), which is a real shame, because its a GREAT program and has been my favorite for years.

-----

About Diamond Back II v2.20 from Bob Luneski (Diamond Back II author) on Genie...

Retail price for Diamond Back II V2.20 has not changed and remains at \$44.95 I am currently working with my bank to get a merchant VISA/MC account so I can make it easier on people. Until that happens, you can send a check to:

Oregon Research Associates  
16200 S.W. Pacific Hwy, Suite 162  
Tigard, OR 97224  
(503) 620-4919

...Mail order would be less expensive, but V2.11 is what is in the distribution channel and then you would have to upgrade. Actually there are not that many V2.11 left in the channels and I am working with the distributor houses to get them out of circulation as soon as possible, however it is something you should be aware of.

An Update on shipping:

The good news: Diamond Back II V2.20 is complete and ready to ship  
The good news: I have the manuals from the printer and they look great  
The good news: I have the registration cards from the printer and they look great  
The good news: I have the envelopes inserted into the inside of the manuals (ready for disks) and I have the sealing sticker from the printer and they look great.  
The good news: I have the shipping material & envelopes and am ready to go  
The bad news: The disk labels will not be ready until next Friday. The printer evidently had to farm out the work to a large disk label company in the east and they will not be able to get to them until the middle of next week + shipping time = next friday promised arrival.

So I have a new projected ship date for V2.20 of March 16, 1991

-----

From Hagop Janoyan (author of Hagterm) on Genie...

...the long-time promised new Hagterm General Manual is available...  
Anyone interested in switching to the new manual(s) can send in \$6 to:

Atari Corner Publishing  
515 Wing Street  
Glendale, CA 91205.

You will receive the new General manual, plus the new HagScript manual. However, I'd like to mention that unless you are not proficient with Hagterm yet, or you are writing HagScript programs, you won't need the new manuals. Everything you would need to know is

already covered in the extensive HELP screens.

On a different note, I've been arguing myself whether to use "HagTerm" or "Hagterm" in the future, where the 't' is not capitalized. Any ideas?

-----

From Lauren (WordFlair) about the orders from people who upgraded to WordFlair from other word processors...

...the swap orders should go out at the end of next week [week of 3-15-91]. We held them up because many people got their ST Informers late and requested an extension to the deadline. To give such a good price, we needed to consolidate the orders and have done so. They go to the duplicator this Monday and should ship Friday, or the following Monday via US Snail.

-----

Comments about the MegaSTe from D.BECKER on Genie....

I have recently purchased a MEGA STe from Infinite Grafix here in Richmond, British Columbia and I thought everyone would be interested in my observations and questions...

Configuration: TOS 2.5, 4 Meg RAM, 48 Meg hard drive, TT style case, math co-processor built in (not just the socket!), LAN plug, 2 serial ports, parallel port, VME plug, cartridge and MIDI ports, stereo audio out, RF out, and a detachable keyboard.

The hard drive came pre-formatted with four equal partitions (nice touch) I simply installed the new AHDI from floppy and was up and running in a few minutes. You are required to touch a key after the hard drive initializes to enter the desktop (or use NOROACH.PRG to set up a delay). The hard drive runs at approx. 28 milliseconds according to test programs.

The new control panel CPX system seems really neat. I can set many parameters from this control panel including system speed (8MHZ, 16MHZ or 16MHZ with cache) 16MHZ with cache causes some incompatibility with the GFA 3.5E interpreter and compiler, Interlink, LDW Power 1.0 and many PD programs written using GFA Basic. The problems are intermittent and usually produce two bombs. I have had no incompatibility using 16MHZ without cache or 8MHZ. I have not tested any games. I am using a monochrome monitor. Calamus seems to run flawlessly at 16MHZ with cache!

Yeah!! The new TOS is a real joy to use. I will not attempt to review its many features. It is much nicer than 1.4! Hey Atari...We need a way to automatically switch processor speeds when running a program, any ideas...Experimentation continues here in Canada...stay tuned!

-----

Comments about "Just Another War in Space" from Hosea Battles on Genie...

...it is complicated, but it is a fun game. It is very strategic oriented. You have to read the manual to figure out the game. I enjoy playing it but it is not for everyone. All menus are mouse driven. I must say, it took me one week to thoroughly learn the game...If you like strategic oriented games with some action, then I would recommend



it. If you can, see it first.

-----

From John Eidsvoog (CodeHead Software) on Genie...

Even though we are planning another official press release real soon, I thought I'd quickly inform everyone of the update situation here since people are being daily bitten by the update "trickle" effect...

CodeKeys 1.3	now shipping
G+Plus 1.5	now shipping
MultiDesk 2.2	now shipping
HotWire 3.0	now shipping
LookIt 1.1	any day now
MaxiFile 3.0	may be delayed as much as two weeks for emergency last minute "had to have" feature
Utilities 4	4 weeks or so
MultiDesk 2.2	is essentially a TT-compatible update so if you have version 2.0-2.1 and don't have a TT, save your money.

All updates are \$10. If you are planning to update any of these products it would make sense to do them all at once to save yourself the trouble of multiple mailings of disks. We have been holding those orders which include products that are not quite ready, but as of today, we will start shipping anything that's ready and send the rest later when it is ready. It's not fair to those whose HotWire is being held for MaxiFile.

-----

From Joe Mardo on Genie...

...The other day I ran across a power supply that's almost exactly the same size as the Mega's internal supply. It is a Power General 3050-1. It puts out +5v at 6amps and +- 12v at 1amp each. It's rated at 50 watts. There were two problems with it.

1. The +-12v heat sinks were too high and I had to cut off 1/4".
2. The mounting holes don't exactly match the Mega bracket but can be adapted.

The dealer [Abbott Electronics in Woburn, Ma] is currently out of 3050-1 units but still has 3050-2. The difference is that instead of +- 12v, they are +- 15v. Since these units use 78xx/79xx series regulators for the +- 12v, and have the two heat sinks that must be shortened, it's a simple matter to replace the 7815/7915's with 7812/7912's while you're cutting down the heat sink. My unit is now running my T-16'd Mega4 with ISAC board and is waiting for an accelerator/memory board for the real test...The best part is it costs only \$17.88

-----

From Larry Ellis on Genie...

In late 1989 I bought a Toadfile 100 and it had a very loud fan. I recently replaced it with a Radio Shack 3" fan (120VAC, 32 CFM, part #273-242, approx. \$17.) The new fan is probably less than half as noisy. It has about 8 or 9 blades, compared to the 4 on the old Torin fan. How much quieter is it? Before I couldn't tell how fragmented the drive was by listening to the heads thrash around finding all the parts of a file. Afterwards, I could. So the new fan even helped speed

up my disk accesses, by getting me to defrag it.

-----

Until next week.....

---

> STR Portfolio News & Informationâ ¢ Keeping up to date...  
=====

THE ATARI PORTFOLIO FORUM  
=====

On CompuServe

by Walter Daniel 75066,164

The forum passed a milestone this week: message number 10,000 was posted. That's a lot of activity for a small (by comparison) forum! Portfolio software from Germany should be appearing soon, I understand. Read message 10124 for an announcement about Micro Hedge, "options and risk management software," from Naiditch Consulting. I'm not really clear on what the program does, but it seems to have something to do with the stock market and investing. PowerBASIC: Portfolio is in "final-final" beta testing, so you should be seeing it soon.

See message 10126 if you would like to know how to use a Diconix 150 inkjet printer with a Portfolio serial interface. Janis Kelly posted a diagram of the necessary cable.

I received my Guide to PBASIC (Version 4.1) this week. BJ Gleason and his cohorts at the American University have completed an impressive task in documenting BJ's free BASIC interpreter for the Portfolio. The guide is 250 pages in length with 8.5 by 11 inch pages and spiral bound in order to lay flat. Material covered includes a tour of PBASIC, a description of the language, some power user tips, a comprehensive reference, and some sample programs. Each statement is described, its syntax given, and an example of its use shown. This manual is well worth the \$25 cost, especially considering that the language itself is free. Ordering instructions are listed in the text file that comes with the PBASIC package; instructions will also be posted in library 1 of the forum.

New uploads in library 1 this week include EXP.BAS, an expenses logger from Hugh Campbell, and DZN.BAS, a puzzle for PBASIC. Some kind soul uploaded MAIL.ADR, an address book file that contains information about mail order vendors that stock Portfolio hardware and accessories.

Someone sent me a message suggesting that a keyboard macro program for the Portfolio would be a good idea. It turns out that there is one in

library 3 of the forum. PORTKEYS, part of the free Portfolio Took Kit 2.0 by Carl Koop, is a function key reassignment program. While F1 through F5 are reserved by the Portfolio, F6 through F10 are available while all 10 function keys are available with the CTRL and ALT keys. PORTKEYS actually creates a batch file that must be executed for the reassignments to take place, but then that's why the AUTOEXEC.BAT exists. You will need to install ANSI.SYS into your DOS.

The Portfolio Took Kit contains nine utilities in all: PORTDISK, PORTINFO, PORTOPT, PORTTONE, PORTFLTR, PORTBOOT, PORTDIV, PORTDIR, and PORTKEYS. Just about every Portfolio user can use one or more of these programs, so the package is well worth downloading. The main file is PTOOL.ARC while PCLOCK.ARC contains updates to PORTCLOCK AND PORTDIV.

---

> YABOCUD! STR Spotlightâ € "...a DIRECT MIND LINK to your computer..."  
=====

CodeHeadQuarters  
Friday, March 15, 1991  
-----

You're a SPECIAL kind of person...

You KNEW you didn't want to waste your time fighting a ground war so  
you bought an Atari computer...

You KNEW you didn't want to waste your time bouncing around at SCUD  
level so you discovered CodeHead Software...

You KNEW what you wanted and YOU GOT IT!

You're TURBOed...

You're CHARGED...

You've got a DIRECT MIND LINK to your computer...

You're FLYIN' HIGH with CodeHead Software under your wings...

But you can still see those other guys in your rear-view mirror and...

You want to go HIGHER,

You want to go FASTER,

You want to go STRAIGHTER, SMOOTHER, EASIER...

With LESS ENERGY, EFFORT, or WASTED MOTION...

After all...isn't that what you've come to EXPECT from CodeHead Software?  
Hasn't CodeHead Software given you more than you thought was possible?  
Wasn't CodeHead Software right there when you wished for something?  
Didn't CodeHead Software show you that the sky's NOT the limit?

Well, just when you thought we were running on "empty"...

```
*****
*
*           CodeHead Software Announces YABOCUD!           *
*                               or                               *
*           Yet Another Batch Of CodeHead UpDates!           *
*
*****
```

Yes, we've been working hard at CodeHead Software and it shows. All of our products have been cleaned and shined so that you can see yourself in them...and you're lookin' good, too! But that's not surprising because everyone looks good in CodeHead Software.

#### WHAT IS YABOCUD??

Excuse us now while we pull our tongue out of our cheek, get serious, and tell you a little bit about what's included in the new versions.

#####

#### HotWire 3.0 - The Fastest, Easiest Way to Run Programs

-----

HotWire 3.0 includes several new features, including a Global Block of 20 more entries allowing you to instantly run up to 74 programs, color entries in the HotWire menu, configurable desktop pattern and color, and greatly enhanced screen saver, mouse accelerator and HOT file editor.

We've released a separate press release of over 200 lines which elaborates on all of HotWire 3.0's features. Look for it where you found this document.

#####

#### MaxiFile 3.0 - The SuperTool

-----

MaxiFile 3.0 has had an unbelievable facelift, adding so many new features that we prepared a separate 300-line press release to describe its power.

#### BUT... EVEN THAT WAS NOT ENOUGH!

Since the MaxiFile press release we've added the single most requested feature -- simultaneous display of both Source and Destination directories in scrollable windows! And of course, there are some unique and special touches even here, with windows that auto-scroll while you select or deselect items, synchronized double-window scrolling, total keyboard control, and much more!

Look for our detailed press release to learn about the power of this SuperTool, or better yet, just buy it...it'll knock your socks off!

#####

## LookIt! & PopIt! - Two Powerful Utilities in One Package

-----

- o LookIt now works in tandem with any editor, allowing you to easily edit the current file being viewed.
- o We've added more speed to LookIt's search function...not too much, but just enough.

#####

## CodeKeys 1.3 - The Macro Tool

-----

It seems like just yesterday that we released CodeKeys but we've already updated it substantially.

We've added:

- o Extended ASCII characters -- you can use CodeKeys to insert any character in the GEM font, such as umlauts, accents, foreign symbols, and graphics characters.
- o Time and Date events -- Two special events will output the current time and/or date. Each time or date event can be individually formatted in thousands of different ways, making it easy to stamp documents and files with the current time and date in any form.
- o Lockout Abort Code provides a definable code sequence to lock or unlock your macros. Locked macros now play more reliably, too.
- o CodeKeys will now automatically execute any macros marked as 'Auto-run' when a 'linked' .KEY file is loaded, allowing you to create macros that will start automatically when their associated programs are run.

#####

## G+Plus 1.5 - The GDOS Replacement

-----

- o G+Plus 1.5 is now fully compatible with the Atari TT computer, as well as all other Atari 68000 series computers including STs and STEs.
- o "Font not found" warnings may be enabled or disabled.
- o Watching of the Alternate key can be turned off to eliminate interference with other uses of the Alternate key while starting programs.
- o Installation editor has been expanded from 12 to 16 entries.
- o "Force Raster" mode provides even more compatibility with problem

programs.

#####

#### MultiDesk 2.2 - The Accessory Loader

-----

- o MultiDesk 2.2 is now fully compatible with the Atari TT computer, as well as all other Atari 68000 series computers including STs and STEs.
- o Accessories that change their menu titles will now be properly displayed in the MultiDesk window.

#####

#### CodeHead Utilities - A Collection of Useful Programs and Accessories

-----

CodeHead Utilities, Release 4, is in the final stages of updating and should be ready on or before May 1st, 1991. All programs will be fully TT-compatible and many new features will be added as well.

#####

As a current owner of any CodeHead product, you can obtain an update by sending your original master disk and \$10 to the address listed below.

Version numbers and suggested retail prices for our products as of  
Wednesday, March 13, 1991 are:

Product	Version	Price
-----	-----	-----
CodeKeys .....	1.3 .....	\$39.95
G+Plus .....	1.5 .....	34.95
MultiDesk .....	2.2 .....	29.95
LookIt & PopIt .....	1.1/1.0 ...	39.95
MaxiFile .....	3.0 .....	39.95
HotWire .....	3.0 .....	44.95
HotWire Plus .....		69.95
MIDIMAX .....	1.3 .....	49.95
CodeHead Utilities ...	Rel 4 .....	34.95

CodeHead Products are available from your local Atari dealer, through  
mail-order houses, or directly from CodeHead Software:

CodeHead Software  
P.O. Box 74090  
Los Angeles, CA 90004

Phone: (213) 386-5735  
FAX: (213) 386-5789  
BBS: (213) 461-2095

CodeHead Software accepts Mastercard, Visa, and American Express, as well as checks, money orders, and cash. Shipping charges are \$3 U.S., \$4 Canada, and \$6 elsewhere.

Current office hours are Monday-Friday 9AM-1PM Pacific time. Prices and hours are subject to change without notice.

Thank you for your support!

---

> ATARI, NOW!! STR FOCUSâ € They will put their "Best Foot Forward!"  
=====

OPERATION GLOBAL COMP\_U\_COM!  
=====

by Ralph Mariano

Computer Communications, (Comp-u-com) globally speaking; are fast, cost effective and beyond a shadow of a doubt, timely. This past week we are witness to Atari's first major thrust toward establishing themselves as a worldwide marketing entity. Atari, has in the last few months, been heavily engaged in the overall development of the 'grand resurgence' of our favorite computer company.

This reporter KNEW the turn-around was imminent at the very moment Sam Tramiel announced during his most recent online conference that;

- A) "Atari had a very clear marketing direction" along with "trying to sell personal computers to people at the best possible price."
- B) "We have reorganized Atari U.S. to be a more responsive and friendly company, a kinder and gentler Atari. We have even added new people in the U.S."

The times we are in ordain that change is the enigma to a successful recovery of Atari Computers in the USA. And change is "the" by-word at Atari along with "accommodate and satisfy." Atari has, in the past, tried to accomplish these things by mere policy adjustments and public relations, it simply wasn't enough. Now, with the actual personnel changes and additions one can honestly say, "real changes are at hand." STReport fully supports Atari's newest efforts at reaching mainstream America. We feel it will be reached like its never been reached before. Atari is, by all indications, now headed in the right direction and.... with a level of determination never before seen by this userbase and market.

This effort is, by all outward appearances, "just what the doctor ordered". "The STe line of computers is destined to become the most popular PC the USA has ever seen." To begin with, the 520STe will be

available in a fabulous software bundle offer. The bundle offer will be made available through chains like Circuit City, McDuff etc... The important point to be made here is that the .5mb machine is the only computer being made directly available through mass merchandisers. The MegaSTe, 1040STe and other products (except the TT030) will be available through national wholesale distribution outlets to dealers only. The TT030 will be made available through Atari Authorized VAR dealers.

Atari, by its design, has provided itself an excellent pipeline to mainstream America. The US marketplace is in for a major boost and upward surge. Most every user will agree Atari's GUI is the very best available in the marketplace. Dollar for dollar, Atari is 'hard to beat' if not impossible. In most cases, the user who starts computing endeavors with an Atari will always find the system the most user friendly ever encountered. Atari has plans of having something for everyone in the computing world, even if it means 'wrapping' an excellent platform in an ms-dos front end. And of course, the exciting new Unix environments are right around the corner.

The most important point to be made is that Atari IS doing something positive and they're doing it now. The second most important point to be made is; please, do not mistake 'national distribution' for mass distribution. These are two entirely different situations. Products flowing through national distribution are available only to retail outlets. The mass distribution is aimed at the consumer level alone. The only machine offered through mass distribution will be the exciting 520STe bundle deal. Which by the way, makes an excellent entry level computer. Also, you read it here first months ago, now for the future watch ... This year's Fall Comdex Show will be Atari's "Best Ever". Like the man says; "You ain't seen nuthin' yet Bud!"

---

> STReport CONFIDENTIALâ €  
=====

"BLOCKBUSTER ATARI NEWS FIRST!"

- Sunnyvale, CA.  
-----

THE NEW PRODUCTS ARE TRUE "STATE OF THE ART"!

#### ST Book: A NEW STE NOTEBOOK

The ST Book, runs the new TOS 2.05 (MegaSTe TOS) and will boast having built-in software. The ST Book (not the final name) comes with an 85 key keyboard, top of the line LCD, and joypad. The ST Book has a serial, parallel, midi, DMA and expansion port. All reduced in physical size. It is a 68000 based STe computer will be available with either a 20, 40, or 80mb built in hard disk. The ST Book is also equipped with a 'silicon



drive' (uses RAM/ROM cards)

ST Pad: Its applications are LIMITLESS!

ST Pad weighs approx. 3 pounds and has an A-4 configuration. Fully ST compatible, the ST Pad (not the final name) will be available with 1-4 mb of RAM and will run any software written for the 640 x 400 monochrome mode. The ST Pad is equipped with a Pen and two buttons, the interface is centered completely around the pen. It is designed to recognize a person's handwriting and/or written gestures executed upon a pressure sensitive LCD. The ST Pad is also equipped with a "silicon drive", that means it will handle ROM/RAM cards.

It has been made very clear that both of these fine devices are indeed prototype units and are subject to change. However the concept and functionality are established and are rock solid. Both units are slated for Sept-Oct 1991 debut/release dates and are expected to be in the pipeline 60 to 90 days later.

- Hannover, Germany  
-----

ATARI INTROS NEWS PRODUCTS IN GERMANY FIRST!

CeBIT '91 NEWSBREAK

March 13, 1991

Things are really heating up here today in Hannover, Germany at the 1991 version of CeBIT which is the largest computer show in the world. Atari surprised everyone with their announcement and demonstration of two exciting new 68000 based computers. The following was described to me by Atari engineers as they were demoing the equipment. I have written this because I felt it newsworthy and an important boost to the moral of Atari users everywhere. I make no guaranty for the accuracy of this information but I have tried to get as much detail as possible. The computer names used are only "internal" Atari names and may be changed before release of the products.

ST Notebook  
-----

This is said to be the smallest 68000 based computer in the world. Its size rivals any PC Notebook style computer that I have seen. It is about 1/2 the size of my laptop computer and maybe 3/4 of an inch thick.

Features include:

- o A built in mouse device that consists of three buttons. The large center button is direction and possibly velocity sensitive to simulate mouse movement in direction and speed.
- o A laptop size keyboard, possibly a little smaller than standard. The tactile feel was good.
- o 512K ROM capability. It looked like TOS 2.05 was shown in the prototype. This prototype did have a very professional and finished look

to it.

- o 1 megabyte or 4 megabyte RAM versions available. Uses pseudo-static RAM.
- o 2 1/2 inch form factor internal hard drive. 20 megabytes was installed. Presently up to 60 megabytes is possible. Probably an IDE (AT) interface.
- o External ports include midi in and out, 1 serial, 1 parallel, 1 combo either floppy drive OR ACSI, 2 RAM card slots (128K cards shown, said to support up to 4 megabytes), 128 pin computer direct port (all address, data lines, CPU control, etc.), modem connector (for optional internal voice/fax modem), keypad/mouse port. Of course to maintain the small size, nearly all connectors were shrunk and non-standard types.
- o An excellent gray-tone LCD display. It did not appear to be backlit which would make sense for the battery life. This was said to be greater than 10 hours before recharging. With less hard drive use, it would be longer.
- o The replaceable battery pack shown was very small and contained about eight AA alkaline batteries. If Ni-Cads were installed, the universal power supply would also recharge them when connected. When the battery pack goes down, the notebook is automatically put in a halted state that is maintained for weeks until recharged. Internal Ni-Cad batteries will maintain the halted state of the computer for about 5 hours if the battery pack is removed from the computer.
- o Atari has a few choices to transfer data to and from the computer. Connect an external floppy drive. Transfer over the serial ports with a modem or direct. Transfer over the parallel ports at around 20 Kbytes/sec. Connect an ACSI device such as a hard drive externally or possibly ACSI to ACSI communications.

#### ST PAD

-----

This is similar to ST Notebook and shares most of the features but has a futuristic interface. A touch sensitive LCD display with a pointing device was shown for mouse type functions and handwriting recognition for input. Physically, ST Pad looked like the "Etch-a-Sketch" drawing toys that we grew up with minus the X/Y knobs. No keyboard was attached and there is not an internal hard drive. The OS software and large amount of scratchpad RAM were said to have Artificial Intelligence features to allow ST Pad to actually learn your handwriting style! (Good luck with mine.)

ST Pad looked like it needed more time for completion but ST Notebook looked like something we may actually see sometime this summer or fall. With this exciting new innovative line of computers and Alwin Stumpf (from Atari GmbH) heading up a new world-wide marketing campaign, it appears that this time Atari really may be backing the promise with the product.

- ST. Louis, MO  
-----

SOFT-LOGIK TO "FACE THE NATION"

There will be a real time conference with Deron Kazmaier, president of SoftLogik Publishing Corporation, on Tuesday, March 26th, at 9:45pm eastern time. The conference will be held in the SoftLogik RoundTable on GENie. People interested in attending should type SOFTLOGIK or m385;2 to attend the conference. All ST desktop publishing enthusiasts are invited, especially PageStream users. And yes, there will be some news of GREAT interest to Atari DTP users at this RTC..! HINTS OF PAGESTREAM 2.XXX??

Editor Note:

The new version of PGST 2.xx is awesome! When it hits it'll blow you away!

- Los Angeles, CA.  
-----

CODEHEADS TO HOLD CONFERENCE!

CodeHead Software Realtime Conference! Your favorite CodeHead Software has just gotten better. Learn all about it in the CodeHead RTC on Wednesday, March 20th at 10:00 pm Eastern.

- New York City, NY  
-----

DEVELOPERS HELPING DEVELOPERS!

INCLUDED IN TRACKER KEY FILES....

This text file, and the TRACKER.KEY files, are copyright 1991 by Step Ahead Software. They may be distributed freely as long as this text file accompanies the TRACKER.KEY files. All other Tracker/ST files may NOT be distributed to any one for any reason. These TRACKER.KEY files require Tracker/ST v2.5 to run correctly. For purchasing or upgrade information for Tracker/ST, the premier mailing list, mail merge and person tracking software for the Atari ST and TT, please contact:

Step Ahead Software  
496-A Hudson Street, Suite F39  
New York City, NY 10014  
212-627-5830

We are pleased to include some special files for Tracker/ST owners who also own CodeKeys from CodeHead Software. CodeKeys is a powerful macro program which lets you combine a series of keystrokes and mouse clicks into a macro which can be called with a single key press. An example of one CodeKey included here is the command which sets Tracker/ST's filter to names with ranks 1-12, and then prints labels, all with one key press! As you can imagine, this macro would be handy for folks who use Tracker/ST to mail out subscriptions for a monthly magazine or newsletter. We highly recommend CodeKeys. If you do not own CodeKeys you may purchase it from your local dealer, or contact:

CodeHead Software  
P.O. Box 74090

Los Angeles, CA 90004  
Voice: (213) 386-5735  
Fax: (213) 386-5789

Don't forget to check out the special discount coupon for CodeKeys included with this version of Tracker/ST...you can save \$10, or 25% off this extremely powerful utility..!

CodeHead Software accepts most major credit cards.

#### THE CODEKEY FILES: =====

We have created CodeKey files for every ST and TT screen resolution supported by Tracker/ST: ST Monochrome, ST Medium Resolution Color, TT Monochrome (which is the same as the Moniterm Monitor on the ST), and TT Medium Resolution. The files are named as follows:

TRACKERC.KEY (ST Medium Color Resolution)  
TRACKERM.KEY (ST Monochrome Resolution)  
TRACKERV.KEY (TT Medium Resolution)  
TRACKERT.KEY (TT Hi Resolution, also for Moniterm Monitor)

Please note that if you are using a floppy drive system, you should use the TRACKER.KEY files in the FLOPPY folder as they have been timed using a floppy disk system. While you will find TRACKER.KEY files for ST Medium Res Color and ST Monochrome in the FLOPPY folder, there are no TRACKER.KEY files for the TT in the FLOPPY folder as all TTs ship with a hard drive.

You should configure CodeKeys according to the instructions in the CodeKeys manual to link Tracker/ST to the correct TRACKER.KEY file for your resolution. Then use the Tracker/ST TUTORIAL file or another unimportant small Tracker/ST file to try out all the macros one at a time. Turn the speaker volume up as the macros will make beep when they are completed.

If you have trouble using any of these macros, use CodeKeys to increase the pause time between events. Also, none of the macros are locked, so you can abort a macro by moving the mouse.

#### THE MACROS: =====

Each of the TRACKER.KEY files contains the exact same 26 macros. We have left slots 27 through 32 free for you to create your own personal macros for Tracker/ST. Of course, you should feel free to edit the macros we've created for your own needs.

Note: CTL = [Control] key, ALT = [Alternate] key, LS = Left Shift  
Key, RS = Right Shift Key, CLR = [Clr/Home] key

SLOT	KEY PRESS	ACTION
----	-----	-----
1	CTL+A	ENTRY SCREEN: Selects "Add Names" and clicks on "Use Defaults" button. Allows you to add names using your user defaults without reaching for the mouse.
2	LS+CTL+ALT+I	ENTRY SCREEN: Removes middle initial ("I

for Initial"). When adding a new name with a middle initial in the first name, when you get to the Salutation field press this keystroke and the middle initial and the period will disappear and the cursor will go down to the company field. You can also use this macro when you are editing a name and are in the Salutation field.

- |    |              |   |
|----|--------------|---|
| 3  | LS+CTL+ALT+W | ENTRY SCREEN: WordFlair II Export. This macro does a Tracker export using all Tracker fields to the file "D:\WFLAIR\TRACKER.IMP". You will have to edit the macro if WordFlair is not on drive D or not in a folder called WFLAIR. Once you run this macro you can exit Tracker, load WordFlair II, and then import your TRACKER.IMP file for use with WordFlair's graphic-filled mail merges. With version 2.5, Tracker/ST's export is compatible with WordFlair II! |
| 4  | CTL+Delete   | ENTRY SCREEN: Deletes a name and clicks on OK. This way you can delete a name without having to reach for the mouse to confirm it.  |
| 5  | LS+CTL+ALT+H | ENTRY SCREEN: Selects "How many in file?" menu bar, pauses for 2 seconds so you can see the number of names, and then clicks on the OK box.   |
| 6  | LS+CTL+ALT+V | ENTRY SCREEN: Create Long Notes for any entry that does not have any (does a "V" for view, and then presses [Return] to start new notes).   |
| 7  | LS+CTL+ALT+L | ENTRY SCREEN: Prints a regular single label for the current name in the Entry Screen. Make sure labels are lined up!  |
| 8  | LS+CTL+ALT+D | ENTRY SCREEN: Shows free RAM and free drive space on drive D. You can edit this macro to default to any drive.  |
| 9  | LS+CTL+ALT+X | ALL MAIN SCREENS: Exits the program without having to press Return. A quick way to exit.  |
| 10 | LS+CTL+ALT+R | POWER STATION: Runs a report to screen using your current settings. Saves a few keystrokes.   |
| 11 | LS+CTL+ALT+F | POWER STATION: Selects a Full report with headers and footers.  |
| 12 | LS+CTL+ALT+S | POWER STATION: Selects a Summary report (names suppressed) with headers and footers.  |

13	LS+CTL+ALT+Z	POWER STATION: Selects the "Filter By Zip Code" menu item so you can enter a Zip Code range without reaching for the mouse.
14	LS+CTL+ALT+G	POWER STATION: Sets filter to Category (think "cateGory") of MYCAT. You should edit this macro to select a category you often filter for (client, prospect, etc.)
15	ALT+R	POWER STATION: This complex macro sets the filter to Ranks between 1 and 12, and then prints labels. It's great for printing labels for magazines or newsletters on a monthly schedule. Edit this to fit the frequency of your mailings (and don't forget to use Tracker/ST's "Countdown" feature to automatically adjust everyone's remaining subscription time!) Make sure labels are in the printer and lined up correctly.
16	LS+CTL+ALT+N	POWER STATION: Selects normal LaserBrain printer driver and resets page width and length to standard sizes (80 wide and 60 tall). You may edit this macro to select the printer driver of your choice.
17	LS+CTL+ALT+C	POWER STATION: Selects condensed LaserBrain printer driver and sets page width to 200 characters across so you can successfully print 3 across labels. You may edit this macro to select any condensed printer driver that you have created for Tracker/ST.
18	LS+RS+R	POWER STATION: Selects Rolodex fields for labels. You must still select the label format you want (or you can extend this macro to select it for you).
19	LS+RS+S	POWER STATION: Selects Standard fields for labels. You must still select the label format you want (or you can extend this macro to select it for you).
20	LS+CTL+ALT+B	QUICK LETTER: Builds a Quick Letter and prints it. You may shorten the pause time if you are using a RAM disk and find this macro waiting a bit too long for your taste.
21	ALT+C	TEXT EDITOR: Copies all text from the position of the cursor to the end of the text to the text buffer. Use this if you have edited a Quick Letter and want to make a new template based on this new version. Position the cursor in the first line below the "Dear Mr. Smith,"

greeting. Now type ALT+C. The macro will copy the entire body of the letter. Now close the text editor and ADD a new Template. Then paste the text using the text editor drop down menu or CONTROL+P.

- |    |              |  |
|----|--------------|--|
| 22 | Alt+S        | TEXT EDITOR: Saves the current text file and allows you to keep editing. Very handy when typing in extensive Long Notes or editing a merge template. Not for use when personalizing a Quick Letter as Quick Letters are not saved. |
| 23 | ALT+K        | TEXT EDITOR: Closes the text editor WITHOUT saving. Careful! Perfect after personalizing a Quick Letter, since Quick Letters are never saved anyway.   |
| 24 | LS+CTL+ALT+P | TEXT EDITOR: Selects Print menu item. This can't be ALT+P since ALT+P is already taken by Tracker/ST for "Plain Text"  |
| 25 | LS+CLR       | TEXT EDITOR: Goes to top of text.  |
| 26 | CTL+CLR      | TEXT EDITOR: Goes to end of text.  |

Feel free to change the keys which trigger these macros (but be careful not to select a key which is already taken by Tracker/ST, such as CONTROL+L, CONTROL+E, CONTROL+P, CONTROL+Q, etc.), and feel free to edit the commands of the macros as well.

Nevin Shalit  
President, Step Ahead Software, Inc.  
March, 1991

---

> Hard Disks STR InfoFileâ ¢ TAX TIME SPECIAL OFFERINGS!....  
=====

NEW LOW PRICES! & MORE MODELS!!  
=====  
>> INCOME TAX REFUND SPECIALS <<  
\*\* EFFECTIVE IMMEDIATELY! \*\*

ABCO COMPUTER ELECTRONICS INC.  
P.O. Box 6672 Jacksonville, Florida 32236-6672  
Est. 1985

---

Voice: 904-783-3319 10 AM - 4 PM EDT  
BBS: 904-786-4176 12-24-96 HST  
FAX: 904-783-3319 12 PM - 6 AM EDT

---

HARD DISK SYSTEMS TO FIT EVERY BUDGET

---

All systems are complete and ready to use, included at NO EXTRA COST  
are clock/calendar and cooling blower(s).

\*-ALL ABCO HARD DISK SYSTEMS ARE FULLY EXPANDABLE-\*  
(you are NOT limited to two drives ONLY!)  
(all cables and connectors installed)

\* ICD HOST ADAPTERS USED EXCLUSIVELY \* OMTI HIGH SPEED CONTROLLERS \*  
\* ICD ADSCSI+ HOST ADAPTERS \* FULL SCSI COMMAND SET SUPPORTED \*  
\* SCSI EMBEDDED CONTROLLER MECHANISMS \*

Model	Description	Conventional	Shoe Box	Autopark	Price
SGN3038	31Mb 28ms	3.5"	Y		419.00
SGN4951	51Mb 28ms	3.5"	Y		519.00
SGN6177	62Mb 24ms	3.5"	Y		619.00
SGN1096	85Mb 24ms	3.5"	Y		649.00
SGN1098	100mb 25ms	3.5"	Y		719.00
SGN6277	120Mb 24ms	3.5"	Y		889.00
SGN1296	168Mb 24ms	3.5"	Y		1069.00
SGN4077	230Mb 24ms	3.5"	Y		1669.00

\*\*\*\*\* SPECIAL - SPECIAL \*\*\*\*\*  
---- FOR USE IN MEGA, MEGA STe & TT030 SYSTEMS ----

>>>> 100mb SCSI HARD DRIVE Mech 25-28ms 3.5" ...ONLY \$469.00!! <<<<

\*\*\*\*\* SPECIAL - SPECIAL \*\*\*\*\*  
  
>>> ALL ABCO DRIVES ARE HIGH SPEED UNITS <<<  
(500 - 600k per sec @ 16 - 33ms)

CALL FOR SUPER SAVINGS ON ALL OUR OTHER CUSTOM UNITS  
FROM 30mb 28MS @ \$419.00!

---\*---

\* SYQUEST 44MB (#555)>> ABCO "44" << REMOVABLE MEDIA DRIVE \*

- SYQUEST 44 MB DRIVE	- ICD ST ADVANTAGE PLUS H/A
- ICD Utility Software	- 3' DMA Cable
- Fan & Clock	- Multi-Unit Power Supply

(1) 44 MB Syquest Cart.



CALL: 1-800-562-4037      ==\*\*==      CALL: 1-904-783-3319  
Customer Orders ONLY      Customer Service  
9am - 8pm EDT  
Tues thru Sat

---

> A "Quotable Quote"â ¢  
=====

"Snake Oil Salesmen Wear Many Different Hats!"

Fearless Fosdick

\*\*\*\*\*

STReport International Online Magazineâ ¢

Available through more than 10,000 Private BBS systems WorldWide!

\*\*\*\*\*

STReportâ ¢	"YOUR INDEPENDENT NEWS SOURCE"	March 15, 1991
16/32bit Magazine	copyright ' ' 1987-91	No.7.11

\*\*\*\*\*

Views, Opinions and Articles Presented herein are not necessarily those of the editors, staff, STReportâ ¢ CPU/MAC/STRâ ¢ or ST Reportâ ¢. Permission t

O

reprint articles is hereby granted, unless otherwise noted. Each reprint must include the name of the publication, date, issue # and the author's name. The entire publication and/or portions therein may not be edited in any way without prior written permission. The contents, at the time of publication, are believed to be reasonably accurate. The editors, contributors and/or staff are not responsible for either the use/misuse of information contained herein or the results obtained therefrom.

\*\*\*\*\*